

REMARKS

Claims 1-20 are pending in the present application. By this Amendment, claims 1-6, 10-13, and 16-20 are amended and claims 21-24 are added. Applicants respectfully request reconsideration of the present claims in view of the foregoing amendments and remarks.

I. Formal Matters

A. Drawings

Applicants have amended FIGS. 2-4 to correct minor editorial problems. Reference character 143 was inadvertently omitted from FIG. 2. Page 6, line 6 of the specification describes integrated support walls 143 with reference to FIG. 2. Battery cell 110 was inadvertently designated with reference number 100 in FIGS. 2-4. FIGS. 2-4 have been amended to correctly designate battery cell 110, as well as, to designate the battery pack with reference number 100 for additional clarity. FIG. 3 was amended to add reference number 135, designating the locking latch catches discussed on line 27 of page 6 with reference to FIG. 3.

B. Specification

The Examiner objected to the disclosure because reference number 143 on page 6 of the specification does not appear in any drawing figure. Applicants have amended FIG. 2 to include reference number 143. Additionally, Applicants have amended the specification on page 2 (line 17) and page 5 (lines 3, 5, and 13) of the specification to provide clarification and to correct minor editorial problems. The clarification amendment is discussed below with respect to a 35 U.S.C. §112 rejection. Page 5 (lines 5 and 13) of the specification was amended to correct a misidentification of the battery pack as reference number 110 with the correct reference number 100. Applicants assert that amendments to the drawings and specification do not introduce new matter.

C. Claim Rejections Under 35 U.S.C. §112

Claims 1-20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter claimed as the invention. This rejection is respectfully traversed. The Examiner objected to the terms “generally rectangular” and “preferably” present in the original claims. Applicants have amended the original claim set as shown above to address the concerns of Examiner Kalafut. Withdrawal of this rejection is respectfully requested.

D. Claim Objections Under 37 CFR §1.75(c)

The Examiner objected to claims 11-13 under 37 CFR §1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants respectfully disagree.

Independent claim 1 recites "the battery cell having *a length, a width, and a thickness suitable* for insertion into the hand-held portable device" (emphasis added). Claims 11-13 recite a wireless telephone, hand-held computer, and personal digital assistant as the hand-held portable device to which the battery cell is suitable for insertion into. Each one of the portable devices of claims 11-13 narrows the scope of claim 1 to battery cells with length, width, and thickness only suitable for the respective devices of claims 11-13. It is likely that a battery pack for a wireless telephone is of significantly different length, width, and thickness than a battery pack for a hand-held computer or a personal digital assistant. Thus, while the scope of claim 1 encompasses battery packs with dimensions suitable for all three types of devices, claims 11-13 narrow the scope to a smaller dimensional range appropriate to a specific type of device.

II. Prior Art Rejections

Claim Rejections Under 35 U.S.C. §103(a)

Rejection of Claims 1-3 and 6-13 In View Of Lamp or Solomon In Combination With Aksoy

Original claims 1-3 and 6-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,326,543 to Lamp et al. (hereinafter, "Lamp") or over U.S. Patent Application Publication No. 2003/0022060 to Solomon et al. (hereinafter, "Solomon"), each in view of U.S. Patent No. 5,298,347 to Aksoy et al. (hereinafter, "Aksoy"). This rejection is respectfully traversed for the reasons given below.

Applicant's claimed invention, as embodied in amended independent claim 1, is directed to a battery pack for powering a hand-held portable electronic device comprising, *inter alia*, a battery cell having an upper surface, a lower surface, and an outer perimeter between the upper surface and the lower surface, the battery cell having a length, a width, and a thickness suitable for insertion into the hand-held portable device; a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell; and a pair of locking latches for latching the battery pack to a hand-held portable electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the outer perimeter, and a second locking latch of said pair of locking latches is defined along a second side of the outer perimeter opposite the first locking latch.

Claim 2 depends from independent claim 1 and further recites a locking latch catch defined along an outer edge of each of the first and second locking latches and extending away from the battery cell. Claim 3 depends from independent claim 1 and further recites a battery pack whereby the locking latches are attached to and integrated with the battery cell casing. Claim 6 depends from independent claim 1 and further recites an electrical battery contact disposed along an outer surface of the battery cell. Claim 7 depends from independent claim 1 and further recites a battery pack length of about 90 millimeters. Claim 8 depends from

independent claim 1 and further recites a battery pack width of about 40 millimeters. Claim 9 depends from independent claim 1 and further recites a battery pack thickness of about 4.5 millimeters. Claim 10 depends from independent claim 1 and further recites a casing constructed from a polycarbonate material. Claim 11 depends from independent claim 1 and further recites a wireless telephone comprising the battery pack of claim 1. Claim 12 depends from independent claim 1 and further recites a hand-held computer comprising the battery pack of claim 1. Claim 13 depends from independent claim 1 and further recites a personal digital assistant comprising the battery pack of claim 1.

The teachings of Lamp are directed to an accessible container that may be used as a battery compartment. Lamp fails to teach, suggest, or describe, *inter alia*, the following recitations of the battery pack of independent claim 1 of the present invention:

- (1) a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell; and
- (2) a pair of locking latches for latching the battery pack to a hand-held portable electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the outer perimeter, and a second locking latch of said pair of locking latches is defined along a second side of the outer perimeter opposite the first locking latch.

Examiner Kalafut stated that Lamp discloses a "battery pack (14), . . . which includes a pair of latches (36) along opposite sides thereof, and integral with the casing of the battery." Applicants respectfully disagree. Battery pack 14 of Lamp does not contain any latches. Reference number 36 of Lamp designates the mating end of latches 20. Latches 20 are attached to *access hatch* 16 as seen in FIGS. 5-8 and described in column 5, lines 17-65, not *battery pack* 14. The access hatch and battery pack are two separate structures.

The teachings of Solomon are directed to an apparatus for enabling the size of a battery pack to be independent of the device it is attached. Like the teachings of Lamp, the teachings of Solomon fail to teach, suggest, or describe a battery pack comprising a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell. Examiner Kalafut relies on the

teaching of Aksoy to allegedly cure the above-noted deficiencies in the teachings of Lamp and Solomon.

The teachings of Aksoy are directed to a battery pack comprising a plurality of cells. Like Lamp and Solomon, Aksoy fails to teach, suggest, or describe a battery pack comprising:

- (1) a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell; and
- (2) a pair of locking latches for latching the battery pack to a hand-held portable electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the outer perimeter, and a second locking latch of said pair of locking latches is defined along a second side of the outer perimeter opposite the first locking latch.

Applicants respectfully submit that there is no motivation or suggestion to one of ordinary skill in the art in either of the teachings of Lamp or Solomon or Aksoy to modify the devices of Lamp or Solomon as suggested by Examiner Kalafut (i.e., incorporating one or more features from the battery pack of Aksoy into the apparatus of Lamp or Solomon); however, even if the combination of the teachings of Lamp or Solomon with Aksoy is proper, the combined teaching still fails to teach or suggest the above-described claim features recited in at least independent claim 1. For at least these reasons, the combined teaching of Lamp or Solomon with Aksoy cannot make obvious the claimed invention embodied in independent claim 1. For at least the reason that the teachings of Lamp or Solomon combined with Aksoy fail to teach the recitations of independent claim 1, the cited art also fails to teach the recitations of dependent claims 2-3, and 6-13. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claims 2, 5 and 16-18 In View Of Lamp In Combination With Aksoy

Original claims 2, 5 and 16-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lamp in view of Aksoy. Applicants respectfully traverse this rejection.

As discussed above, claim 2 depends from allowable claim 1 and recites additional claim features. Claim 5 incorporates the recitations of allowable independent claim 1 and dependent claim 4 and further recites locking latches that are deformable such that they may

be forced inward toward the outer surface of the casing between the connection point of the first end to the battery cell casing and the connection point of the second end so that the outer surface of the locking latches and the locking latch catches may pass by an inner surface of the detents.

Applicant's claimed invention, as embodied in amended independent claim 16, is directed to a portable electronic device comprising, *inter alia*, a battery compartment for receiving a battery pack for powering the electronic device, the battery compartment including a battery support structure for supporting a battery pack after the battery pack is inserted into the electronic device, wherein the battery support structure includes spaced-apart first and second latching detents for securing the battery pack to the electronic device; and a battery pack including a battery cell, the battery cell having an upper surface, a lower surface, and an outer perimeter between the upper surface and the lower surface, the battery cell having a length, a width, and a thickness suitable for insertion into the portable electronic device; a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell; and a pair of locking latches for engaging the latching detents for attaching the battery pack to the electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the outer perimeter, and a second locking latch of said pair of locking latches is defined along a second side of the outer perimeter opposite the first locking latch.

Claim 17 depends from independent claim 16 and further recites a locking latch catch defined along an outer edge of each of the first and second locking latches for engaging first and second latching detents of the battery support structure of the electronic device for securing the battery pack within the electronic device. Claim 18 incorporates the recitations of independent claim 16 and dependent claim 17 and further recites locking latches that are deformable such that the locking latches may be inward toward an outer surface of the casing.

As discussed above, Lamp and Aksoy, alone and in combination, fail to teach the recitations of independent claim 1 or dependent claim 2. Further, since claim 5 incorporates the recitations of allowable claim 1 and recites additional claim features, the combination of Lamp and Aksoy fails to render obvious the invention as embodied in claim 5.

Lamp and Aksoy, alone and in combination, fail to teach, suggest, or describe, *inter alia*, the following recitations of the battery pack of independent claim 16 of the present invention:

(1) a battery compartment for receiving a battery pack including a battery support structure, wherein the battery support structure includes spaced-apart first and second latching detents for securing the battery pack to the electronic device;

(2) a battery cell casing integrally connected to and surrounding the outer perimeter of the battery cell, whereby the casing has a thickness equal to the thickness of the battery cell; and

(3) a pair of locking latches for latching the battery pack to a hand-held portable electronic device, whereby a first locking latch of the pair of locking latches is defined along a first side of the outer perimeter, and a second locking latch of said pair of locking latches is defined along a second side of the outer perimeter opposite the first locking latch.

Applicants respectfully submit that there is no motivation or suggestion to one of ordinary skill in the art in either of the teachings of Lamp or Aksoy to modify the devices of Lamp to incorporate one or more features from the battery pack of Aksoy into the apparatus of Lamp as suggested by Examiner Kalafut. However, even if the combination of the teachings of Lamp with Aksoy is proper, the combined teaching still fails to teach or suggest the above-described claim features recited in at least independent claim 16. For at least these reasons, the combined teaching of Lamp with Aksoy cannot make obvious the claimed invention embodied in independent claim 16. Since the teachings of Lamp combined with Aksoy fail to teach the recitations of independent claim 16, the cited art also fails to teach the recitations of dependent claims 17-18. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claims 14, 15, 19, and 20 In View Of Lamp In Combination With Aksoy and Rouillard

Original claims 14, 15, 19, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lamp in view of Aksoy and further in view of U.S. Patent No. 6,120,930 to Rouillard et al. (hereinafter, "Rouillard").

As discussed above, Lamp in combination with Aksoy fails to teach, suggest, or describe the recitations of independent claims 1 and 16. Applicants respectfully submit that there is no motivation or suggestion to one of ordinary skill in the art in either of the teachings of Lamp, Aksoy, or Rouillard to modify the devices of Lamp as suggested by Examiner Kalafut (i.e., incorporating one or more features from the battery pack of Aksoy and Rouillard into the apparatus of Lamp); however, even if the combination of the teachings of Lamp with Aksoy and Rouillard is proper, the combined teaching still fails to teach or suggest the above-described claim features recited in at least independent claims 1 and 16. For at least these reasons, the combined teaching of Lamp with Aksoy and Rouillard cannot make obvious the claimed invention embodied in independent claims 1 and 16. For at least the reason that the teachings of Lamp combined with Aksoy and Rouillard fail to teach the recitations of independent claims 1 and 16, the cited art also fails to teach the recitations of dependent claims 14, 15, 19, and 20. Accordingly, withdrawal of this rejection is respectfully requested.

For at least the reasons given above, Applicants respectfully submit neither Lamp nor Solomon anticipate Applicants' claimed invention as embodied in claims 1-24. Further Applicants respectfully submit that a *prima facie* case of obviousness has not been made, and that the combination of the teaching of Lamp or Solomon with the teaching of Aksoy or Aksoy and Rouillard fails to make obvious Applicants' claimed invention as embodied in independent claims 1 and 16. Since claims 2-15, and 17-20 depend from independent claims 1 and 16 and recite additional claim features, Applicants respectfully submit that the combination of the teaching of Lamp or Solomon with the teaching of Aksoy or Aksoy and Rouillard fails to make obvious claims 2-15, and 17-20. Accordingly, Applicants respectfully request withdrawal of this rejection.

III. Conclusion

For at least the reasons given above, Applicants submit that claims 1-24 define patentable subject matter. Accordingly, Applicants respectfully request allowance of these claims.

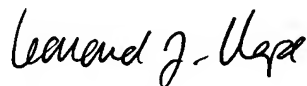
Amendment And Response
Serial No. 10/071,336

Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is respectfully requested to contact Applicant's representative at the telephone number listed below.

Please charge \$72.00 for four additional claims to Deposit Account No. 13-2725. The Commissioner is hereby authorized to charge any additional fees that may be required or credit any overpayment to this Deposit Account.

Respectfully submitted,

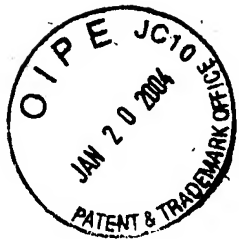
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Annotated Sheet Showing Changes

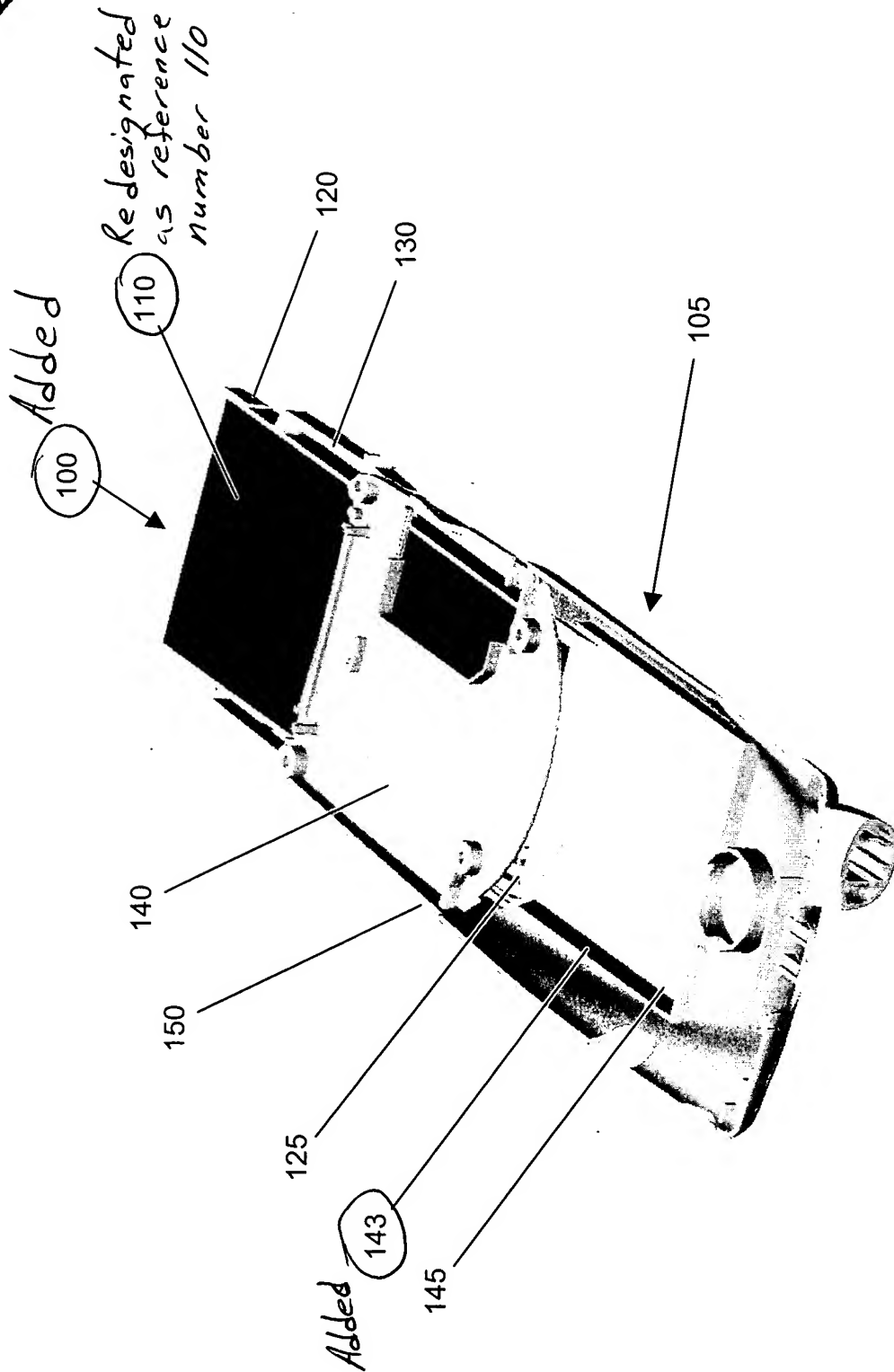


Fig. 2

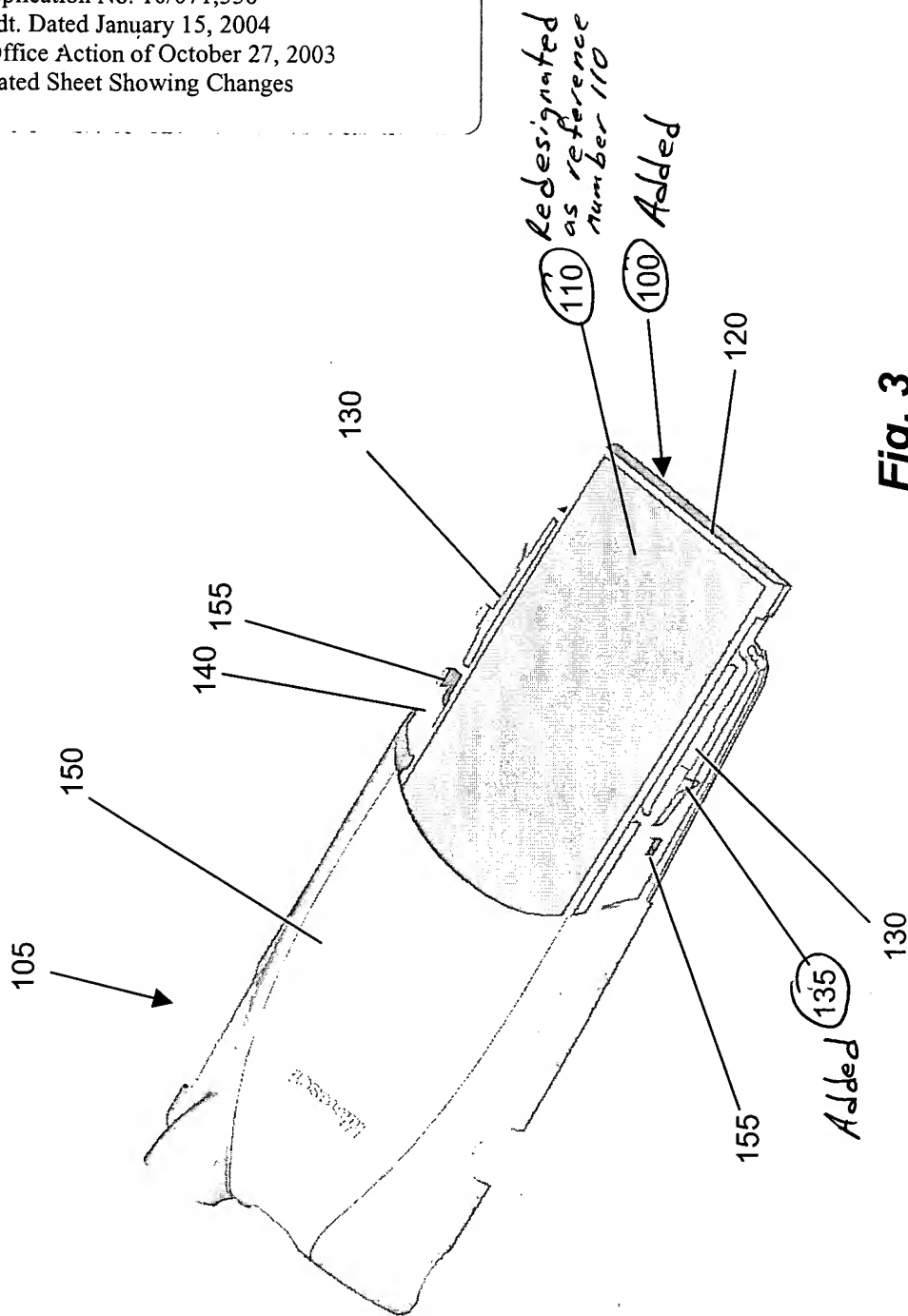
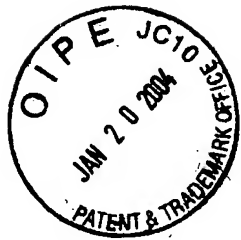


Fig. 3

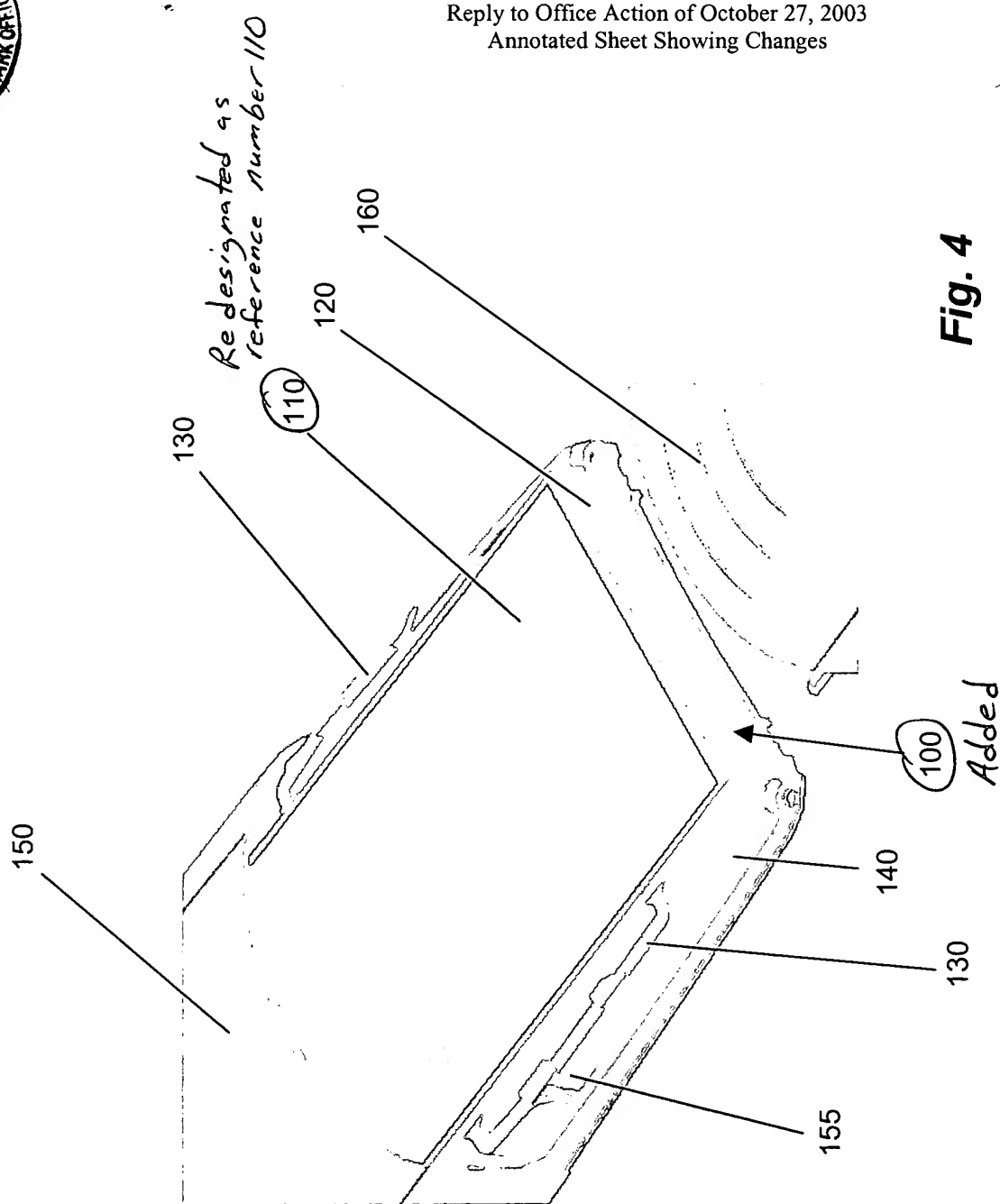
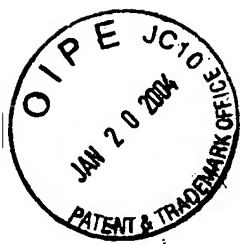


Fig. 4